

REMARKS

Claims 1-8 remain in the application. Applicant respectfully requests reexamination.

Claims 1-8 were rejected under 35 U.S.C. § 103(a) as unpatentable over *Zur* (US 4,287,620) or *Wu* (US 5,966,762) or *Shaw* (US 6,154,900) or *Bartlett et al.* (US 6,353,950) in view of *Larson* (US 5,948,303) or *Lidow* (US 4,228,806) or *Forbes* (US 5,187,657) or *Blair* (US 6,575,895) and *Higgins et al.* (US 5,655,241). Applicant respectfully traverses.

The invention of the present application comprises an adjustable bed system that includes, a multi-adjustable bed, a judgment unit for determining the particular sleep stage of the person on the bed and a control unit for tilting the bed in response to the judgment unit. The tilt operation is performed while the bed is in a bent position, a position that causes the upper body or the person lying on the bed to be elevated while, at the same time, bending the knees.

The invention results in an adjustable bed system that is very comfortable to the user, and allows the user to easily turn on his or her side while in a bent position during various stages of sleep, giving the sleeping person a less stressful sleep. The combination of turning while in a bent position, as shown in Figure 2, provides a very safe and restful sleep that prevents the development of bedsores as compared to conventional adjustable beds which only provide the bent positions.

Zur discloses an adjustable bed which is composed of pivotally connected supports provided with locking devices that function to provide a plurality of positions as may be desired by the occupant of the bed for comfort, or as required for treatment or health reasons.

Wu is concerned with an air mattress that comprises a plurality of inflatable sacs connected together in a mattress envelope and an air pump for inflating and deflating the sacs to cushion a patient on the air mattress. *Wu* discloses a leg bending device made up of a plurality of

inflatable sacs, and a body turning device, also made up of a plurality of inflatable sacs longitudinally juxtapositioned at the right and left side of the torso section and head section of a person lying on the mattress.

Shaw is directed to a prone patient turning device for laterally rotating a patient by utilizing an air supply and a pair of inflatable bladders.

Bartlett discloses an adjustable bed having an inflatable surface on which a patient is lying. An angular position sensor and a rotation sensor on the surface of the mattress, or on the bottom of the bed frame provides feedback signals corresponding to changes in the rotation angle of the mattress surface to compensate for the pressure in the inflatable mattress bladders.

Larson is concerned with a temperature control for a bed which includes at least one heating element mounted on the mattress. A temperature sensor detects the temperature of the resting area and transmits this information to a central control unit which adjusts the temperature of the resting area as desired.

Lidow discloses a wake-up alarm which can be inhibited when a monitoring system determines that the sleeping subject is in a deep sleep phase.

Forbes is directed to a cardiac analyzer system that monitors REM sleep, along with other body functions, to trigger the recording of ECG data.

Blair is directed to a programmable dream analyzer apparatus for assisting the user in recording his or her dreams. The apparatus determines when a user may be in REM sleep and wakes the user up during a REM event.

Higgins is directed to a mattress cover assembly that has a stretchable top panel and pad designed to distribute pressure applied to the top of the mattress and thereby provide a body lying on the mattress with minimal supporting surface pressure at any point on the body.

The Office Action has brought together nine references and recognizes that none of the references, not even *Higgins*, “specifically recite automatic posture positioning change during sleep” (page 3, office action).

The Office Action then proceeds on to speculate that “one of ordinary skill in the art would extract the desire for such an automatic positioning change without arousing the person at sleep.”

The Office Action’s references to *Zur*, *Wu*, *Shaw* and *Bartlett*, *Larson*, *Lidow*, *Forbes* and *Blair*, and even *Higgins et al.*, simply do not support this conclusion. These references do not teach or suggest Applicant’s claimed invention, an adjustable bed system that comprises “a judgment unit adapted to determine the sleep stage of a person lying on the bed; and a control unit adapted to control the tilt unit in response to a sleep stage judgment made by the judgment unit.”

As the prior art discloses, the reasons for detecting various stages of sleep, prior to the present invention, were wake-up alarms, cardiac recording or dream recording. Use of sleep mode detection for the triggering of events such as these, is clearly different from the concept of the present invention, to adjust the bed in response to a specific sleep mode.

Applicant respectfully suggests that the combination of nine references in the present office action is the result of hindsight gained from the knowledge of Applicant’s invention rather than the teachings of the prior art. Applicant respectfully requests that this rejection be withdrawn.

In light of the above amendments and remarks, Applicant believes that all the claims are allowable, and respectfully requests allowance of all claims and passing of this application to issue.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on March 11, 2005.

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Signature

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Respectfully submitted,

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